

complete response thereto. By this Amendment, claims 13, 14, 20, 21, 24, 25-27 and 29 have been further amended to more clearly set forth the claimed invention. No new matter has been added. Accordingly, claims 13-29 are pending in this application and are submitted for consideration.

Claims 13-29 were rejected under 35 U.S.C. §103 as being unpatentable over Read (EFTPOS: Electronic funds transfer at point of sale, Electronics and Communications Engineering Journal, November/December 1989) in view of Harrop (New electronics for payment: IEE REVIEW OCTOBER 1989, pp 339-342), Schuler et al. (WO 90/15382, "Schuler") and Powers (U.S. Patent No. 5,521,362).

In making this rejection, with respect to claim 13, the Office Action asserted that Read discloses all the elements of the claimed invention, except for disclosing a second terminal group that does not perform ciphering/deciphering, or an access control program or a transferring unit. Harrop, Schuler and Powers were cited for teaching these limitations.

With respect to claims 14-29, the Office Action further recited that Read discloses all the elements of the claimed invention except for making a payment from the second purse without performing ciphering/deciphering of the information related to money, or the claimed access control program, or a transferring unit. Harrop, Schuler and Powers were again cited for disclosing these limitations.

However, Applicants respectfully submit that the present invention recites subject matter neither disclosed nor suggested by any combination of the prior art.

Applicants' amended claim 13 includes an electronic purse system having a double-structured purse. The purse system includes an IC card, and a first terminal

group which can transfer money to the IC card. The first terminal group includes a plurality of terminals. Each terminal in the first terminal group includes a first ciphering/deciphering unit which performs ciphering/deciphering of information relating to money utilizing a code number. A second terminal group can transfer money to the IC card. The second terminal group also includes a plurality of terminals. Each terminal in the second terminal group does not perform ciphering/deciphering of the information relating to money. The IC card includes a first purse, a second purse, a second ciphering/deciphering unit for ciphering/deciphering of the information relating to money obtained from one of the terminals in the first terminal group utilizing the code number, and an access control program. The access control program includes a first purse access program including access steps for the first purse using the second ciphering/deciphering unit and access steps for the second purse without the second ciphering/deciphering unit during executing the first purse program. The access control program also includes a second purse access program to access the second purse without ciphering/ deciphering, and has a step of rejecting a command to access the first purse during executing the second purse access program. The access control program further includes a selection program which selects one of the first and second purse access programs according to information received at the time the IC card is coupled to one of the first and second terminal groups, so that the terminals of the second terminal group cannot access the first purse access program and the terminals of the first terminal group can access both the first and second purse access programs. A transferring unit is provided that transfers an amount of money requested from outside from the first purse to the second purse as electronic money. When making a

payment from the first purse, the information relating to the money is transferred between the first purse of the IC card and the one terminal of the first terminal group after ciphering of the information in the first and second ciphering/deciphering units. When making a payment from the second purse, the information relating to the money is transferred between the second purse of the IC card and the terminals of the second terminal group without ciphering of the information. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

Applicants' amended claim 14 includes an IC card applicable to an electronic purse system having a double-structured purse. The card includes a first purse for storing a first amount of money therein and a second purse for storing a second amount of money therein. A first ciphering/deciphering unit ciphers/deciphers information relating to money obtained from a first terminal group having a second ciphering/deciphering unit and utilizing a code number. An access control program includes a first purse access program including access steps for the first purse using the second ciphering/deciphering unit and access steps for the second purse, without the second ciphering/deciphering unit during executing the first purse program. The access control program also includes second purse access program to access the second purse, without the ciphering/deciphering and having a step of rejecting a command to access the first purse during executing the second purse access program. The access control program further includes and a selection program that selects one of the first and second purse access programs according to information received at the time the IC

card is coupled to one of the first and a second terminal groups, so that terminals of the second terminal group cannot access the first purse access program and terminals of the first terminal group can access both the first and second purse access programs. A transferring unit is provided that transfers an amount of money requested from outside from the first purse to the second purse as electronic money. When making a payment from the first purse, information relating to the money is transferred between the first purse and the first terminal group after ciphering of the information in the first and second ciphering/deciphering units. When making a payment from the second purse, information relating to the money is transferred between the second purse and the second terminal group without ciphering of the information. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

Applicants' amended claim 20 includes an electric purse system having a double structured purse using an IC card that has a first device or machine belonging to a first group of which the device or machine transfers money between the IC card and performs ciphering/deciphering of information relating to money utilizing a code number, and a second device or machine belonging to a second group of which the device or machine transfers money between the IC card and performs the transfer without ciphering/deciphering of information relating to money, utilizing a code number. The system includes an integrated computer and connecting terminals commonly used to couple the integrated computer to one device or machine of the first group or the second group, for a money transaction. The system further includes a memory having a

first purse that is accessible by the integrated computer, and a second purse that is accessible by the integrated computer. The memory includes a ciphering/deciphering program for ciphering/deciphering using code numbers relating to the code number and for ciphering/deciphering the information relating to money and an access control program executed by the integrated computer. The access control program including a first purse access program to access the first purse using the ciphering/deciphering program during the communication of the transaction, a second purse access program to access the second purse without the ciphering/deciphering, and a selecting steps program for selecting and starting one of the first purse access program and second purse access program. The selecting steps program has identifying steps for identifying one of the first group or second group by information received from the connecting terminal and the identifying steps provided before starting of the first purse access program. The selecting step program starts the first purse access program when the early communication information is identified as in the first group and starts the second purse access program when the early communication information is identified as in the second group. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

Applicants' amended claim 21 includes an IC-card applicable to an electric purse system having a first device or machine belonging to a first group of, which the device or machine transfers money between the IC card and performs ciphering/deciphering of information relating to money utilizing a code number, and a second device or machine

belonging to a second group, of which device or machine transfers money between the IC card and performs the transfer without ciphering/deciphering of information relating to money, utilizing a code number. The system includes an integrated computer, and connecting terminals commonly used to couple the integrated computer to one of device or machine of the first group or the second group, for a money transaction. A memory stores a first purse accessible by the integrated computer, a second purse accessible by the integrated computer, a ciphering/deciphering program for ciphering/deciphering using code numbers relating to the code number and for ciphering/deciphering the information relating to money, and an access control program executed by the integrated computer. The access control program includes a first purse access program to access the first purse using the second ciphering/deciphering program during the communication of the transaction, a second purse access program to access the second purse without the ciphering/deciphering; and a selecting steps program for selecting and starting one of the first purse access program and second purse access program. The selecting steps program has steps for identifying a group by early communication information from the connecting terminal of which early communication information identify one group of the first group and second group; starting of the first purse access program when the early communication information is identified as in the first group; and starting of second purse access program when the early communication information is identified as in the second group. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

Applicants' amended claim 24 includes an IC-card applicable to an electric purse system for taking a monetary transaction between a machine having an integrated computer and a connecting terminal for receiving and outputting monetary information from and to the machine and the integrated computer. A memory is provided for storing a first purse storing monetary information being accessible by the integrated computer, a second purse storing monetary information being accessible by the integrated computer, a ciphering/deciphering program for ciphering/deciphering using related code number relating to the code number and for ciphering/deciphering the monetary information and an access control program executed by the integrated computer. The access control program includes a first purse access program to access the first purse using the ciphering/deciphering program during the communication of the transaction and to access the second purse, and the first purse access program to access the second purse by a situation during the monetary transaction of the first purse access program, a second purse access program to access only the second purse without the ciphering/deciphering during a period of the second purse access program. A selecting steps program is provided for selecting and starting one of the first purse access program and second purse access program and having the steps of identifying one of a first group and a second group by communication information from the connecting terminal before the monetary transaction; starting the first purse access program when the communication information is identified as in the first group; and starting second purse access program when the communication information is identified as in the second group. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second

purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

Applicants' amended claim 25 recites an IC-card applicable to an electric purse system for taking a monetary transaction between a transaction machine including an integrated computer and connecting terminals for receiving and outputting monetary information from and to the transaction machine and the integrated computer. A memory stores a first purse storing monetary information being accessible by the integrated computer, a first directory storing access rights in correlation with an identification of which machine is being allowed to access the first purse, a second purse storing monetary information being accessible by the integrated computer, a ciphering/deciphering program for ciphering/deciphering using code numbers relating to the code number and for ciphering/deciphering the information of money and, an access control program executed by the integrated computer. The access control program includes a first purse access program for access of the first purse and second purse using the ciphering/deciphering program during the transaction to access the first purse, a second purse access program to access to the second purse without the ciphering/deciphering during a period of the second purse access program, and a selecting steps program for selecting and starting one of the first purse access program and second purse access program. The selecting program has the steps of identifying one of a first group and a second group by communication information from the connecting terminal before the monetary transaction; starting of second purse access program when the communication information is identified as in the second group; comparing and invalidating after the step of identifying, for comparing received



identification received via the connecting terminal to the identification store into the first directory, and for invalidating of an access by the transaction machine where the received identification; and starting of the first purse access program when the received identification is identified as one of allowed machines by the comparing step. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

Applicants' amended claim 26 includes an IC-card applicable to an electric purse system for taking a monetary transaction between a transaction machine including means for discrimination of the transaction machine into a first type of machine or a second type of machine, wherein the first type of machine is allowed only to perform a payment transaction and the second type of machine is allowed at least to perform a payment transaction and a deposition transaction. Means are provided for double purse having first purse and second purse for storing electric money amount. Means are provided for ciphering/deciphering information of the electric money when the first purse is used in the monetary transaction. Means for executing the payment transaction are provided using the first purse and for rejecting an access to the first purse where the discrimination means discriminates the machine as in the first type. Means are further provided for executing the payment transaction and the deposition transaction using either the first purse using ciphering/deciphering means and second purse where the discriminating means discriminates the machine as in the second type. The IC card determines from area ID information transmitted from the first terminal group whether an

access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

Applicants' amended claim 27 includes a transaction apparatus executing monetary transactions in an electric purse system using IC-card storing monetary information therein. The apparatus includes an IC-card reader/writer for accessing the IC-card, a cash counter for dispensing actual cash according to the monetary transaction and a display for guiding an operation of the monetary transaction. An input device is provided for manually inputting monetary transaction data desired by operator. Means are provided for accessing a host computer having operator's personal account, as well as ciphering/deciphering means for ciphering and/or deciphering information between the IC-card via the IC-card reader/writer. Monetary transaction control means are provided for both dispensing the actual cash by the cash counter and loading electronic cash into the IC-card using the ciphering/deciphering means by an access to the operator's personal account of the host computer as a transaction. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

Applicants' amended claim 29 includes a transaction apparatus executing monetary transaction in electric multi- purse system using an IC-card storing a plurality of monetary information as a multi-purse therein. The apparatus includes an IC-card reader/writer for access to the IC-card. A cash depositing unit is provided for depositing actual cash being inserted into the apparatus during the transaction and deriving total depositing amount of one transaction. A display guides an operation of the monetary

transaction and an input device manually inputs transaction data. Means are provided for accessing a host computer having a personal account and ciphering/deciphering means are provided for ciphering and/or deciphering information between the IC-card via the IC-card reader/writer. Monetary transaction control means are provided for depositing the monetary amount to the personal account and the IC-card, in which a total amount being equal to the total depositing amount, of which the depositing unit derives. Separation of the total amount into either multi-purse or personal account is guided by the display, input means receive each amount for purses and personal account and the monetary transaction control means doing according to the separation of input. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information.

An advantage of the present invention is that a transferring unit is provided for transferring an amount of money requested from outside from the first purse to the second purse as electronic money. Since the first purse requires ciphering and deciphering and the second purse does not, access to the second purse is easier. Thus by providing a transferring unit for transferring an amount of money requested from outside from the first purse to the second purse as electronic money, a person could access money from the second purse easily. This may be helpful in the situation when you are lending someone such as a child the card and only want the child to have limited access to a certain amount of money. In this case, money can be transferred

from the first purse to the second purse from the outside providing more flexibility in the usage of the invention.

Read discloses an electronic funds transfer at point of sale card having three levels of memory, a first secret memory, a second confidential memory and a third free memory (see page 267, left column of Read). The first secret memory is within the card and unalterable. The first secret memory is used to store the operating system, application program and other programs that are necessary to perform a transaction. The second confidential memory is unalterable and can be authorized to be read externally. The second confidential memory is used to store information such as manufacturing number, name of manufacturer, identification number or a PIN number, which can be read by certain people, but cannot be updated. The third free memory may be read from and written into under control of an application program.

Harrop discloses a telephone that uses chip memory cards. When a chip memory card is placed in the telephone the amount of money on the card is instantly available for use. No authorization is required.

Schuler discloses a microcomputer debit card having two accounts. A first protected account has restricted access and a second account has less restricted access.

The Office Action took the position that it is well known in the art to use prepayment cards that do not perform ciphering/deciphering. Therefore, combining this teaching with Read would facilitate the use of the smart card by eliminating the ciphering/deciphering step for high security transactions. The Office Action further asserted that the system of Read, as modified by Harrop would inherently perform

ciphering/deciphering for one group of transactions, as opposed to another group or transactions. The Office Action also took the position that it would have been obvious to modify Read, by the access control program of Schuler to facilitate the use of the smart card to minimize the loss of funds when the card is lost. The Office Action still further asserted that it would have been obvious to modify Read by utilizing the transferring unit of Powers to provide enhanced security features.

Firstly, Applicants respectfully submit that the combination of Read and Harrop fails to disclose or suggest an IC card including a first purse, a second purse, or an access control program that includes a first purse access program, including access steps for the first purse using the second ciphering/deciphering unit and access steps for the second purse without the second ciphering/deciphering unit during executing the first purse program. The IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information. This claimed configuration provides the present invention the benefit of the two purses being at different security levels.

Secondly, as taught by MPEP § 2112, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of the result or characteristic. Therefore, in relying upon the theory of inherency, the Office Action must provide a basis in fact and/or technical reasoning to reasonably support the determination that the alleged inherent characteristic necessarily flows from the teaching of the prior art. The Office Action has failed to provide objective evidence or cogent technical reasoning to support this conclusion.

Thirdly, although Powers discloses a double purse structure, it is possible in Powers to withdraw money from only one purse. On the other hand, according to the purse of the present invention, it is possible to withdraw money from both the purses.

Lastly, with respect to the assertion certain claimed limitations recite intended use and do not differentiate the claimed apparatus from the prior art, Applicants respectfully disagree because Read, Harrop, Schuler and Power, either taken either alone or in combination fail to disclose, teach or suggest the claimed invention.

Therefore, Read, Harrop, Schuler and Power, either taken either alone or in combination fail to disclose, teach or suggest an IC card including a first purse, a second purse, or an access control program that includes a first purse access program, including access steps for the first purse using the second ciphering/deciphering unit and access steps for the second purse without the second ciphering/deciphering unit during executing the first purse program, as recited in claims 13, 14, 20, 21, 24, 25-27, and 29.

Therefore, it is respectfully submitted that the Applicants' invention, as set forth in claims 13 and 14, is not obvious within the meaning of 35 U.S.C. § 103.

With respect to claims 15-19, these claims are ultimately dependent on claim 14, claims 22 and 23 depend from claim 21 and claim 28 depends from claim 27. It is therefore submitted that these claims are patentable over the cited references for at least the same reasons discussed above with respect to the independent claims.

Read, Harrop, Schuler and Power also fail to disclose or suggest, either alone or in combination that the IC card determines from area ID information transmitted from the first terminal group whether an access demanded is to the first purse or the second

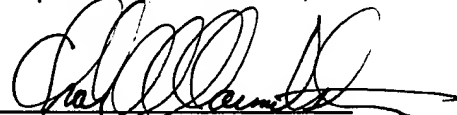
purse. Based on a result of the determination, the IC card determines whether to decipher the area ID information, as further recited in claims 13, 14, 20, 21, 24, 25-27 and 29.

In light of the foregoing, withdrawal of the rejection of claims 13-19 as being unpatentable over Read in view of Harrop, Schuler and Power is respectfully requested.

It is respectfully submitted that the application is now in condition for allowance. If it is believed that the application is not in condition for allowance, the Examiner is respectfully requested to contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, applicants petition for an appropriate extension of time. Please charge any fee deficiencies or credit any overpayments to Deposit Account No. 01-2300, **referencing docket number 108287-08002.**

Respectfully submitted,

  
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Enclosures: Marked-Up Copy of the Claims  
Petition for Extension of Time (three months)